Distributed by:

JAMECO® ELECTRONICS

www.Jameco.com ✦ 1-800-831-4242

The content and copyrights of the attached material are the property of its owner.

PCI I/O Card

User's Guide

Jameco Part Number 172013

Important Note!

In order to minimize possible installation problems and/or resource conflicts:

Read Me First!

About This Manual

This manual is designed to assist users in installing their PCI I/O Card. Information in this document has been carefully checked for accuracy; however, no guarantee is given as to the correctness of the contents. The information contained in this document is subject to change without notice.

Edition

Second Edition, February 2000

Copyright

©2000 by U.S. Offshore Co., Ltd. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means (electronic, mechanical, photocopying, recording, or otherwise), without the prior written permission of the publisher.

Trademarks

Microsoft, Windows, MS-DOS, Windows 95, Windows 98 and Windows NT are registered trademarks of Microsoft Corporation. Other trademarks and registered trademarks of products referred to in this manual are the properties of their respective holders.

Radio Frequency Interference

The Federal Communications Commission Radio Interference Statement includes this warning:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of these measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

The user should not modify or change this device without written approval from U.S. Offshore Co., Ltd. Modification could void authority to use this equipment.

Table of Contents

Chapter 1 1

Introduction 1

General Layout 1

Chapter 2 3

Before You Get Started 3

Unpacking the PCI I/O Card 3

Other Items Needed 3

Safety Recommendations 3

Serial Number 4

System Requirements 4

Driver Support 4

Chapter 3 5

Hardware Installation 5

Configuration 5

Cable/Bracket Assembly Installation 5

PCI I/O Card Installation 6

Chapter 4 7

Software Installation 7

Windows 95 and Windows 98 7

Uninstalling Your PCI I/O Card Drivers in Windows 95/98 14

Windows NT 4.0 Driver Installation Guide 15

Verifying Your Windows NT 4.0 Installation 16

Configuring Your PCI I/O Card Serial Port under WIN NT 17

Configuring Your Parallel Port's I/O Address under WIN NT 20

Uninstalling Your PCI I/O Card Drivers under WIN NT 4.0 21

Chapter 5 25

Connecting Peripheral Devices 25

Connecting a Peripheral to Your PCI I/O Card's Parallel Port.. 25
Connecting a Scanner or Zip Drive to the PCI I/O Card..... 25
Connecting Peripherals to Your PCI I/O Card's Serial Port..... 28

Chapter 6 **29**

Troubleshooting..... 29
General Troubleshooting..... 29
Questions & Answers..... 29
Hardware & Motherboard Questions..... 29
Windows 95/98 Questions..... 30
Windows NT 4.x Questions..... 33
Peripheral Device Questions..... 34

Chapter 1

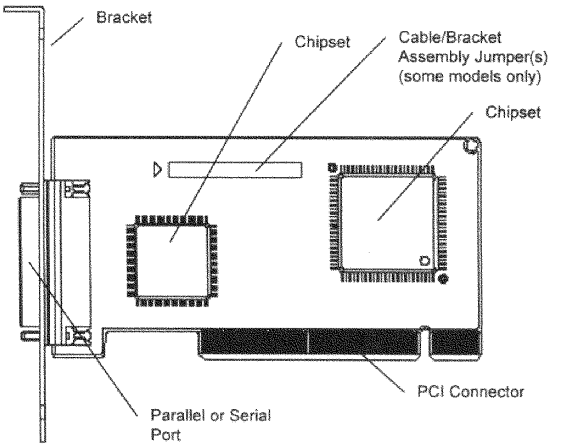
INTRODUCTION

Congratulations on purchasing your PCI I/O (Input/Output) Card. This User's Guide is written to provide an easy-to-read yet thorough reference for using and installing your PCI I/O Card. Detailed driver installation information can be obtained from the product's CD driver disk. Before installing device drivers, browse the CD to familiarize yourself with its contents.

General Layout

Before continuing, please take a moment to familiarize yourself with your new PCI I/O Card. The design of each card varies slightly from the diagram below, but the essential design elements remain the same.

Figure: General PCI I/O Card Layout



Chapter 2

BEFORE YOU GET STARTED

Unpacking the PCI I/O Card

Open the product's package and inspect the contents. If any of the items listed below are damaged or missing, please contact your dealer:

1. Your PCI I/O Card
2. This User's Guide
3. Driver CD-ROM Disk
4. A Cable/Bracket Assembly (for some models only)
5. External Parallel or Serial Splitter Cable (for some models only)

Other Items Needed

In addition to the contents of the package, you may need one or more of the following:

1. Your computer's documentation
2. Your operating system's documentation
3. The documentation of the peripheral that will be connected to your PCI I/O Card
4. A small to medium sized Phillips and/or flathead screwdriver
5. A small container for storing screws and other small parts

Safety Recommendations

When installing your PCI I/O Card, do the following to avoid possible electric shock and damage to your system:

1. Turn off all power to your computer.

2. Unplug all cables connected to your computer, including the power cord.
3. Ground yourself by touching a metallic object before handling the card and before installing the card.

Serial Number

Locate the product's serial number (usually on the back of the card), and record the number below. If the product does not have its original serial number attached, your warranty may be voided.

Serial Number (S/N): _____

System Requirements

- 75MHz or Higher CPU (recommended)
- Plug-&-Play Compliant BIOS
- 32MB of RAM
- Windows 95, Windows 98 or Windows NT

Driver Support

Your PCI I/O Card comes with a comprehensive Driver CD-ROM Disk which supports the following popular systems:

- Windows 95
- Windows 98
- Windows NT

For additional driver information, consult the appropriate directory for your operating system on your Driver CD-ROM Disk.

NOTE: Driver information is subject to change. Check with your dealer for updated driver information.

Chapter 3

HARDWARE INSTALLATION

Because the design of computer cases varies greatly, only general installation instructions are given. Please refer to your computer's reference manual whenever in doubt.

Configuration

Because your PCI I/O Card is Plug & Play ready, you need not worry about setting I/O addresses and IRQs. All this will be handled for you automatically through Plug & Play functionality.

Cable/Bracket Assembly Installation

If you purchased an I/O card, which has a Cable/Bracket Assembly for parallel or serial ports, before installation, you will need to first attach this to your PCI I/O Card. There is only one way to correctly attach the Cable/Bracket Assembly to your PCI I/O Card. To do so, follow the instructions below:

1. Locate the Cable/Bracket Assembly Jumper(s) on the I/O card (refer to the "General PCI I/O Card Layout" figure in chapter 1). Locate the attachment pins that the Cable/Bracket Assembly will be connected to.
2. Take the ribbon cable(s) of the Cable/Bracket Assembly and insert the cable's connector onto the I/O card's Cable/Bracket Jumper pins. It is important that the side of each ribbon cable with a red line be aligned with the side of the jumper with the white arrow (the side closest to the bracket).

PCI I/O Card Installation

Follow the instructions below to install your PCI I/O Card.

1. Turn off the power to your computer and any other connected peripherals.
2. Before installing your PCI I/O Card, you should wear a wrist-grounding strap. If a wrist-grounding strap is not available, ground yourself by briefly touching an unpainted piece of metal.
3. Remove the mounting screws located at the rear and/or side panels of your computer and gently slide the cover off.

> **CAUTION:** Your PCI I/O Card must be installed in a PCI expansion slot. Please be sure that you have such a slot available before installing the card. Plugging the card into either a 16 or 8 bit ISA slot will damage both the card and your computer.

4. Locate an available PCI expansion slot and remove its cover from the rear panel of your computer.
5. Align the card with the expansion slot then, gently but firmly, insert the card. Make sure the card is seated snugly and oriented correctly.
6. Fasten the card to your computer's case using the screws you removed in Step 4.
7. Gently replace both your computer's cover and the appropriate mounting screws.
8. You are now ready to power-up your system and install any appropriate software.

Chapter 4

SOFTWARE INSTALLATION

This chapter presents general software installation instructions for the following popular systems: Windows 95, Windows 98 and Windows NT.

Your PCI I/O Card automatically configures with Windows Plug & Play functionality. This means that once you plug the card into a computer, Windows will automatically detect the card and launch an installation wizard.

The appropriate driver is located at the following path on your Driver CD-ROM Disk: D:\PCI\ (where "D:" is your designated CD-ROM drive).

> **NOTE:** Before installing any software please insure that all hardware is properly configured and installed according to the Hardware Installation section of chapter 3.

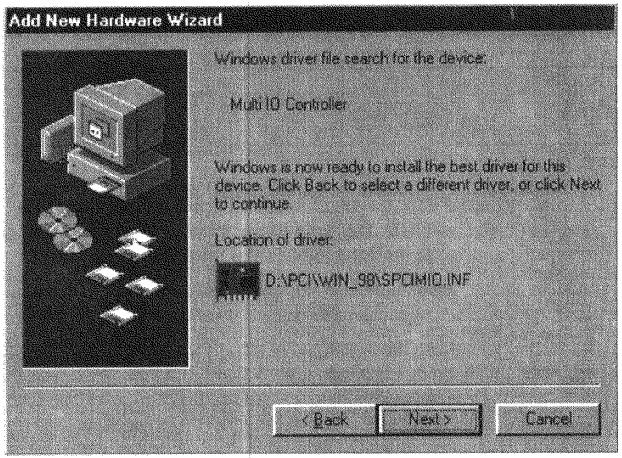
Windows 95 and Windows 98

Follow the instructions below to install your PCI I/O Card driver under Windows 95 and Windows 98.

1. When you are sure that your PCI I/O Card is properly installed, start Windows.
2. After Windows starts up, it will automatically detect your newly installed PCI I/O Card and launch an **Add New Hardware Wizard** (**Update Device Driver Wizard** in Windows 95). Click *Next>*. (If your system fails to detect your PCI I/O Card, click your Windows **Start** button, select *Settings*, then click on *Control Panel*. A **Control Panel** window will appear. Double click the *Add New Hardware* icon).
3. In Windows 98 the installation wizard will ask you what you want it to do. Click the "Search for the best driver

for your device. (Recommended)" radio dial. Then click *Next>*. In Windows 95 click the *Other Locations* button.

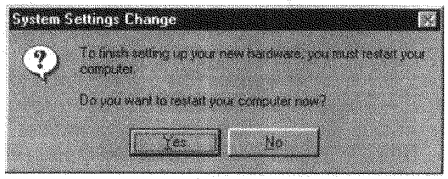
4. At the next screen, insert your PCI I/O Card Driver CD-ROM Disk. Then click the *Browse* button.
5. A **Browse for Folder** window will appear. Double click your designated CD-ROM drive letter (usually drive D:).
6. Double click the "PCI" folder, then double click the folder that corresponds with your operating system (e.g., "*Win_95*" for Windows 95 or "*Win_98*" for Windows 98). Then click *OK*.
7. You will be returned to the previous screen. The location should read your device driver's path (e.g., D:\PCI\Win_95). Click *Next>/OK*.


Add New Hardware Wizard
Windows driver file search for the device:
Multi IO Controller
Windows is now ready to install the best driver for this device. Click Back to select a different driver, or click Next to continue.
Location of driver:
D:\PCI\WIN_98\SPCIMIO.INF
< Back
Next >
Cancel

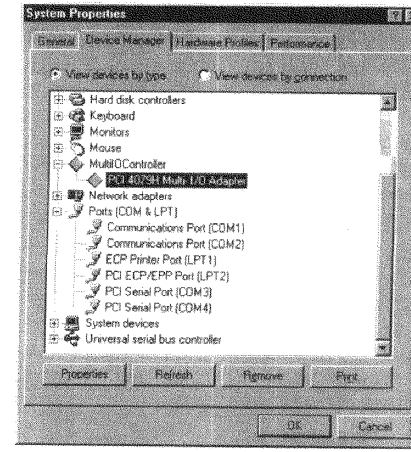
8. Windows will notify you that it will search for your device. Click *Next>*. (In Windows 95 it will report that it found the driver. Click *Finish*.)

9. An **Insert Disk** window may appear. Click *OK*. From the **Copying Files** window, click the *Browse* button. From the **Open** window under *Drives*, change the drop-down box to your designated CD drive letter (Usually D:). A list of folders will appear under *Folders*. Double click on the PCI folder, then click on the folder that corresponds with your operating system (e.g., Win_95). Under *File name* the file "*comdrv.vxd*" will be highlighted (If not, make sure you opened the correct folder.). Click *OK*. You will be returned to the **Copying Files** screen. Under "Copy files from:" your device driver's location should be displayed (e.g., D:\PCI\Win_95). Click *OK*.
10. If your card has more than one port, Windows will detect each port and automatically install the additional ports (In some instances Windows may launch an additional **Add New Hardware Wizard** for each port. In this case, repeat the steps above to install the other ports).
11. Then you will be notified that the installation process has been completed. Click *Finish*.
12. A window should appear asking you if you want to re-start your computer. After installing new hardware, it's always a good idea to restart your computer. Click *Yes*.

NOTE: If you install additional ports into your system, you may be requested to restart your computer when you finish setting up each port. Click *Yes* to restart your computer only if all serial and parallel ports have been installed. If not, click *No*. For example, if you install two ports in your system, click *No* when asked to restart your computer after the first System Setting Change and click *Yes* to restart your computer after the last System Setting Change.


System Settings Change
To finish setting up your new hardware, you must restart your computer.
Do you want to restart your computer now?
Yes
No

13. To test that your card was installed properly, click on your Windows **Start** button. Click *Settings* and then click the *Control Panel.*
14. A **Control Panel** window will open. Double click the System icon.
15. A **System Properties** window will appear. From the *Device Manager* tab, find the *MultiIOController* icon and double click it.
16. Underneath *MultiIOController* your newly installed PCI I/O Card (PCI xxxxx Multi- I/O Adapter) will be listed. Double click the icon.
17. A **Properties** window will appear. Under *Device status* it should read "This device is working properly."
18. To check the I/O card's IRQ address, click the *Resources* tab. Under "Resource type" your card's assigned IRQ address will be listed.
19. To check each individual port on the card, from the *Device Manager* tab in the **System Properties** window, go to *Ports (COM & LPT)* and double click the icon. A listing of COM and LPT ports will appear. Double click the appropriate port or click once on the icon and click the *Properties* button. A **Properties** window will appear. Under *Device status* it should read "This device is working properly."



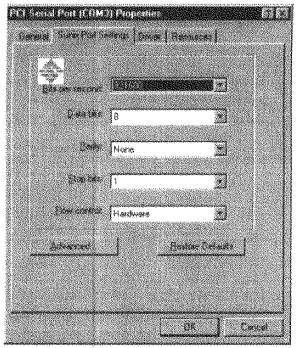
Configuring Your COM Port

If you'd like to make changes to your PCI I/O Card's configuration, follow the steps below. Default values are pre-set by the computer. Only experienced users should attempt to make changes to the default settings.

> **Warning:** Tampering with your default values could render your computer inoperable. Before attempting to adjust your default settings, make a note of the original default values. If your changes render your computer inoperable, restore the original default values.

1. Click on your Windows **Start** button. Click *Settings* and then click *Control Panel.*
2. A **Control Panel** window will open. Double click the System icon.

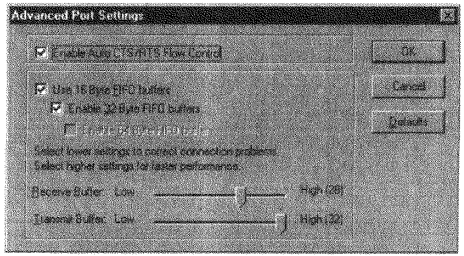
3. A **System Properties** window will appear. From the *Device Manager* tab, find the *MultiIOController* icon and double click it.
4. Underneath *MultiIOController* your newly installed PCI I/O Card (PCI xxxxx Multi- I/O Adapter) will be listed. Double click the icon.
5. A **Properties** window will appear. Click the *Port Settings* tab.
6. From the *Port Settings* tab, use the drop down boxes to configure the *Bits per second*, *Data bits*, *Parity*, *Stop bits* and *Flow control* if you want to make changes from the default values.



There are three kinds of flow controls: Xon/Xoff, Hardware and None. "Xon/Xoff" refers to software protocol control. "Hardware" refers to RTS/CTS control, but RTS/CTS is actually controlled by software. "None" means there is no defined flow control.

7. Click the *Advanced* button if you want to set more advanced features.

8. An **Advanced Port Settings** window will appear. From this window you can enable the Auto CTS/RTS Flow Control, configure the FIFO buffer, and configure the Receive/Transmit Buffer level if you want to further customize the port.



Enable Auto CTS/RTS Flow Control

Enable Auto CTS/RTS Flow Control means the CTS/RTS flow control is controlled by hardware automatically. Your System will be more stable if this function is enabled.

16 Byte FIFO Buffers

If your card supports a 32-byte FIFO, you can use either a 16 or a 32-byte FIFO. If your card supports a 64-byte FIFO, you can select 64, 32 or 16-byte FIFO. The default value is a 16-byte FIFO. If your card cannot support a 32/64-byte FIFO, the Enable 32/64 Byte FIFO buffer will be highlighted in gray.

Receive Buffer/Transmit Buffer

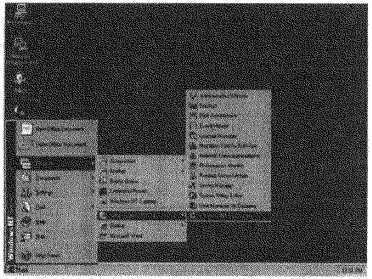
Setting the Receive/Transmit Buffer to a higher value will provide faster performance because the interrupts will be reduced, and the time for the interrupt service routine will be lessened. A receive buffer overflow will occur if the CPU

6. At the Multi-I/O Card Setup screen, click the *Continue* button to install the driver.
7. Click *OK* to reboot your computer and load the newly installed driver to Windows NT.

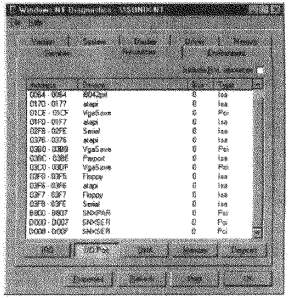
Verifying Your Windows NT 4.0 Installation

To confirm that your Windows NT 4.0 installation was successful, follow the instructions below.

1. Click your Windows **Start** button. Go to Programs, Administrative Tools [Common] and click on Windows NT Diagnostics.



2. A **Windows NT Diagnostic** screen will appear. Click the Resources tab and then click the *I/O Port* button.



3. Here you will find the I/O addresses for parallel ports (SNXPAR), serial ports (SNXSER) or a combination thereof depending on the card installed.
4. Click the *IRQ* button for detailed IRQ information.

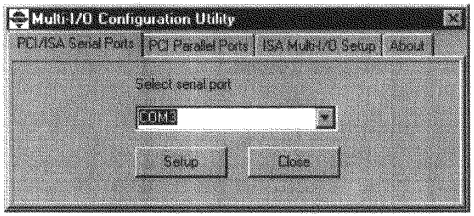
Configuring Your PCI I/O Card Serial Port under WIN NT

If you have a PCI I/O Card with a serial port and are using Windows NT, then follow the instructions below to configure your port. This section is for advanced users.

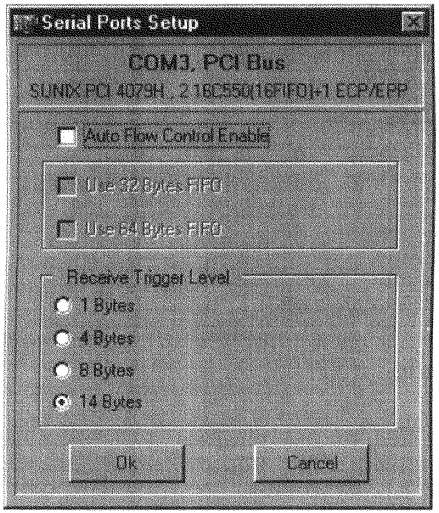
1. Click your Windows **Start** button. Go to *Settings* and then *Control Panel*.

2. From the **Control Panel** window, double click *Multi-I/O Card Configuration* icon.

3. A **Multi-I/O Configuration Utility** window will appear. From the *PCI/ISA Serial Ports* tab, under "Select serial port" use the drop-down box to select the serial port you want to configure. Then click the *Setup* button to configure the serial port.



4. A **Serial Port Setup** window will appear. Select the *Auto Flow Control Enable*, the appropriate FIFO amount and/or the *Receive Trigger Level*, then click *OK*.
   - Auto Flow Control Enable means the CTS/RTS flow control is controlled by hardware automatically. Your system will be more stable if the function is enabled.
   - If your card supports a 32-byte FIFO, you can use either a 16 or a 32-byte FIFO. If your card supports a 64-byte FIFO, you can select 64, 32 or 16-byte FIFO. The default value is a 16-byte FIFO. If your card cannot support a 32/64-byte FIFO, the Enable 32/64 Byte FIFO buffer will be highlighted in gray.
   - Setting the Receive Trigger Level to a higher value will allow faster performance because the interrupts will be reduced, but the time for the interrupt service routine will become shorter. You may encounter a "Receive buffer overflow" notice if your CPU's speed is not fast enough to handle the overflow. If the system is not stable, select the lower value to correct the problem.



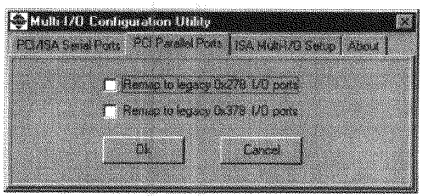
NOTE: If you install a modem that is using auto detect under Windows NT, the *Auto Flow Control Enable* will be disabled.

Configuring Your Parallel Port's I/O Address under WIN NT

If your PCI I/O Card comes with a parallel port and you are running Windows NT, follow the instructions below to configure your parallel port.

1. Click your Windows **Start** button. Go to *Settings* and then *Control Panel*.
2. From the **Control Panel** window, double click *Multi-I/O Card Configuration* icon.

3. A **Multi-I/O Configuration Utility** window will appear. From the *PCI/ISA Parallel Ports* tab, under "Select parallel port" use the drop-down box to select the parallel port you want to configure. Then click the *Setup* button to configure the serial port.
4. Click *PCI Parallel Ports* to configure the I/O address of each parallel port.
5. To remap your I/O address to 0x378 and/or 0x278, select the appropriate box and click OK.



6. The new settings will take effect after you reboot your computer.

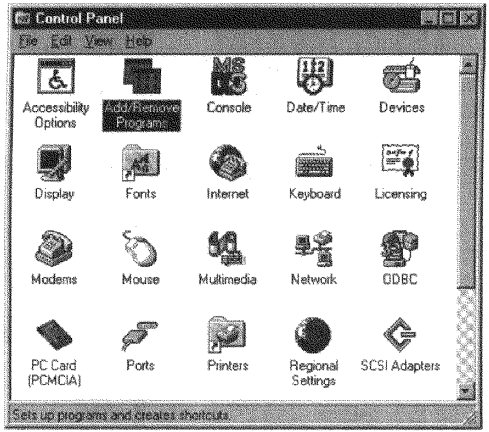
NOTE: When a parallel port is remapped to 0x378 or 0x278, the on board parallel port will become the last LPT port. If you connect a scanner to the remapped parallel port, you must turn on the scanner before the computer is turned on.

Uninstalling Your PCI I/O Card Drivers under WIN NT 4.0

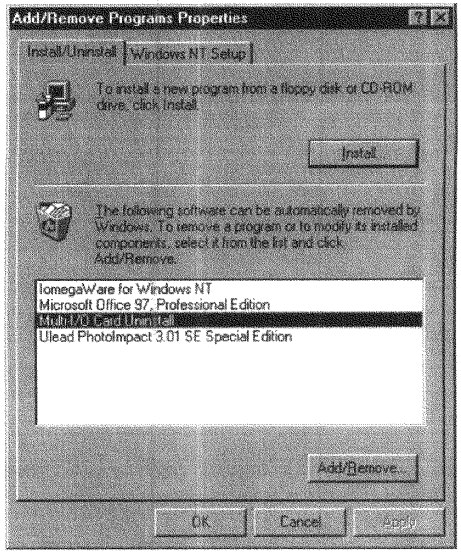
If you are running Windows NT and would like to remove your PCI drivers, follow the instructions below.

1. Click your Windows **Start** button. Go to *Settings* and then *Control Panel*.

2. From the **Control Panel** window, double click *Add/Remove Programs* icon.

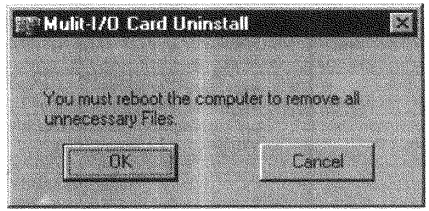


3. An **Add/Remove Programs Properties** window will appear. Select *Multi-I/O Card Uninstall*. Then click the **Add/Remove** button.


Add/Remove Programs Properties
Install/Uninstall
Windows NT Setup
To install a new program from a floppy disk or CD-ROM drive, click Install.
Install
The following software can be automatically removed by Windows. To remove a program or to modify its installed components, select it from the list and click Add/Remove.
IomegaWare for Windows NT
Microsoft Office 97, Professional Edition
Multi-I/O Card Uninstall
Ulead PhotoImpact 3.01 SE Special Edition
Add/Remove...
OK
Cancel
Apply

4. You will be asked to confirm your driver removal. Press *OK* to remove the Multi-I/O Card driver.

5. A **Mulit-I/O Card Uninstall** window will appear. After removing drivers, it's always a good idea to restart your computer. Click *OK* to reboot your computer.



Chapter 5

CONNECTING PERIPHERAL DEVICES

Your PCI I/O Card is equipped with one or more ports that can connect to a wide array of peripheral devices.

- If your PCI I/O Card has a parallel port, then it can be connected to color printers, plotters, scanners, Zip drives and MP3 players, to name a few. Some I/O Parallel Cards support ECP protocol. ECP supports data transfer speeds of up to 21.4MB/sec; whereas EPP/SPP/BPP/PS2 protocols only support data transfer speeds of up to 770KB/sec.

- If your PCI I/O Card has a serial port, then it can be connected to modems, digitizers, bar code readers, ISDN and PDA devices, to name a few.

Connecting a Peripheral to Your PCI I/O Card's Parallel Port

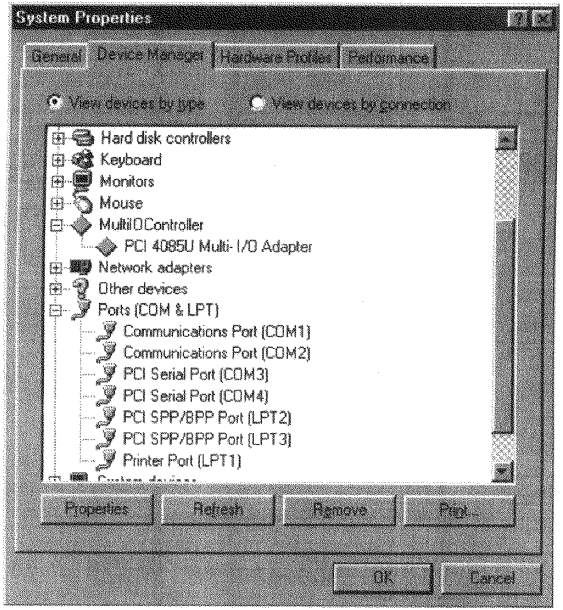
In order to install peripheral devices onto your PCI I/O Card's parallel port, follow the device's installation steps located in the device's user's manual.

Connecting a Scanner or Zip Drive to the PCI I/O Card

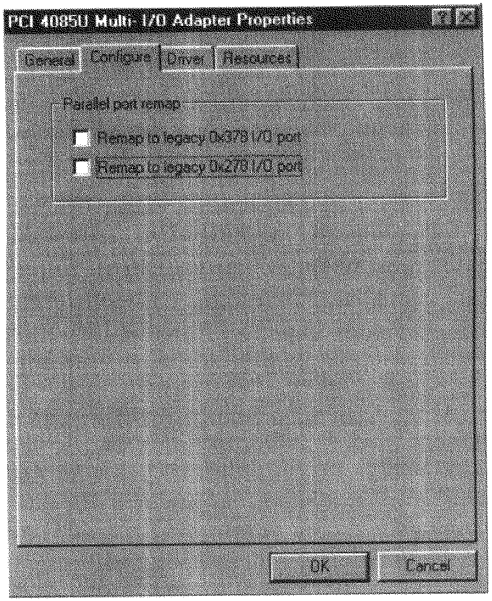
If you want to connect a scanner or a Zip drive to the PCI I/O Card, you'll need to re-map the parallel port I/O address to 0x378 or 0x278. Follow the instructions below to re-map your parallel port I/O address.

1. Click your Windows **Start** button. Go to *Settings* and then *Control Panel.*
2. Your **Control Panel** will open. Double click the *System* icon.

3. From the *Device Manager* tab, double click the *Multi IO Controller* icon. Select *PCI Multi-I/O Adapter*. Click the *Properties* button.



4. A **PCI Multi-I/O Adapter Properties** window will appear. From the *Configure* tab, select "Remap to legacy 0x378" and/or "0x278 I/O ports." Click *OK*, then the ports will be remapped after the computer reboots.



5. After rebooting your computer, you can check the Parallel Port I/O addresses by going to System Properties.
6. If you don't want to remap the Parallel Port I/O address to 0x378 or 0x278, de-select Remap to legacy 0x378 and/or 0x278 I/O port. Click *OK*, then your system will restore the default values after the computer reboots.

NOTE: In order to use your scanner via the PCI I/O Card, you must first power on your scanner before you power on your computer.

Connecting Peripherals to Your PCI I/O Card's Serial Port

In order to install peripheral devices onto your PCI I/O Card's serial port, follow the device's installation steps located in the device's user's manual.

Chapter 6

TROUBLESHOOTING

General Troubleshooting

In the event that you have any difficulties installing your PCI I/O Card, check the following items:

1. Confirm that the card is securely installed.
2. Confirm that the cable connection between your peripheral device and the PCI I/O Card is secure.
3. Make sure you have restarted your computer each time new drivers have been installed onto your system or when your system resources have been modified.
4. Make sure that serial/parallel port addresses and IRQ settings assigned to the I/O Card are not in conflict with other devices already installed on your computer.
5. Make sure your attached peripheral device is powered on.
6. If you are still experiencing difficulties, the next step is to contact your dealer.

Questions & Answers

Below is a list of a few common questions and answers designed to help you troubleshoot any potential hardware or software problems you may encounter with your PCI I/O Card. For more detailed answers, always contact your dealer.

Hardware & Motherboard Questions

Q: My card does not work and in Device Manager there is a red or yellow symbol next to my device's icon.

A: Re-boot and see if your BIOS has detected your PCI device on screen. A BIOS setting screen should look something like the following PCI device listing:

PCI device listing...

BusNo.	DeviceNo	FuncNo	VenderID	DeviceClass	IRQ
0	11	1409	7168	simple comm control	10
1	12	1409	7268	simple comm control	11

If you install two PCI I/O Cards, under "FuncNo" you must have two 1409 lines for your PCI I/O Card to work properly. If only one 1409 is listed or none at all, your card may be defective. Return the card to your dealer.

Q: How do you install an ISA I/O card and a PCI I/O Card in one system simultaneously?

A: Install your ISA I/O card first. If you have already installed a PCI I/O Card into your system, you must first uninstall the driver and then remove the card. Then install your ISA I/O card first, followed by your PCI I/O Card. If you would like to install more than one PCI I/O Card onto the same system, you should install each one at a time.

Windows 95/98 Questions

Q: Can HYPER TERMINAL (98) accept COM5?

A: HYPER TERMINAL for WINDOWS 98 only recognizes COM 1-4.

Q: After installing a 2S or 2P card, the system assigned my card to COM3 and COM5 (LPT2 and LPT4). Why isn't it located on COM3/4 and LPT2/3?

A: Go to your device manager and double click on VIRTUAL INFRARED. Some motherboards assign VIRTUAL

INFRARED Serial to COM3 and VIRTUAL INFARED to LPT3 (but you cannot see it under COM/LPT device). In this instance your card will be assigned to COM3/5 and LPT 2/4.

Q: My system can't find my newly installed I/O card.

A: Reboot. Some systems will register your card only after the driver(s) are installed and the system has rebooted. You may need to reboot for the system to automatically find it.

Q: How do I uninstall my PCI I/O Card driver?

A: Click on your Windows **Start** button, go to *Settings*, then *Control Panel*. From the Control Panel, double click the Add/Remove icon. An **Add/Remove Properties** window will appear. From the Uninstall tab, select your device's driver and then click the Add/Remove button.

Q: How do I adjust my PCI I/O Card settings within Windows 95/98?

A: Click on your Windows **Start** button, go to *Settings*, then *Control Panel*. From the **Control Panel**, double click the *Systems* icon. A **System Properties** window will appear. From the *Device Manager* tab, double click the Ports (COM & LPT) icon. Then select the device you'd like to test. Click on the Properties button. A **Properties** window will appear. Under *Device status* it should read "This device is working properly."

Q: How do I remap my ports to handle more than two PCI parallel ports (2P, 1P, 2S/1P, 4S/2P,...). I tried to remap two printer ports to 278/378, but it didn't work.

A: When your motherboard is set to 378, you can change that setting in the BIOS to 3BC. After you save your settings, then you can re-map the two ports to 278/378. Remember to note your default settings to restore in the event your system hangs.

Q: How do I uninstall the PCI I/O Card's driver under Windows NT?

A: Go to Control Panel -> Add/Remove Software -> Select the PCI I/O driver and then select OK to remove the driver.

Q: Where can I adjust the card settings in Windows NT?

A: After you install your card's driver, go to the CONTROL PANEL. Open up the icon for "*PCI I/O Configure*," and you can configure your settings for CONTROL FLOW, FIFO size select and SPEED select. Note your default settings before making changes.

Q: After I installed my PCI I/O RS-232 card NT driver, I tried to configure the FIFO buffer (16 or 32), BAUD RATE (from 1200 to 921Kb) and AUTO FLOW control, but why can't I set the AUTO FLOW control?

A: Sorry, Windows NT 4.0 does not support hardware AUTO FLOW control.

Peripheral Device Questions

If you have problems or questions when installing peripheral devices to your PCI I/O Card after verifying the correct installation procedures in the manual or User's Guide included with the peripheral device, read the following:

Modems

Q: I installed my PCI RS-232 card and installed a modem to my card. I can't get my modem to work. What's wrong?

A: Always connect modems to COM1 or COM2 and then test the device. If the modem cannot be detected, make sure your modem is on and working properly. Check the connection. Reboot and try again. Finally, uninstall the card and

modem driver and repeat the installation steps for both the card and the modem.

Zip Drives

Q: I installed a ZIP drive under Windows 98, but I can't get it to work.

A: You'll need to re-map the PCI I/O Card to 278/378. To re-map a printer card, go to My Computer -> Control Panel -> System -> Device Manager -> MultiIOController. Select any PCI I/O Icon, go to "configure" and select RE-MAP to 278/378. After you re-map a card, you have to restart your computer. When your computer restarts, now it's OK to install your Zip drive device driver. Note: If your motherboard printer port setting is set to 378H, and you'd like to install a 2-port PCI I/O Card, change your printer port BIOS setting to 3BC which is normal SPP mode.

Q: After installation, I can't get my Zip drive to work.

A: Assure that the screws on the Zip cable are screwed securely into the PCI I/O Card. Some Zip cables assign the #2 pin as the ground pin on their 25-pin cables. Normally the #12 pin is the ground pin. Screwing in the cable securely helps ground the Zip drive.

Q: I installed your PCI I/O Card as LPT3, connected a ZIP drive to the card, but can't get the ZIP to work.

A: ZIP drives can only be assigned to 378, 278, and 3BC. If you motherboard's LPT1 is assigned to 378, our 2-port PCI parallel card will be assigned to LPT2 (278), LPT3 is 6000, (3BC will not accept ECP/EPP mode so our driver can not be assigned to 3BC). Thus, you must connect the PCI I/O Card to LPT2. To do this, go to Device Manager -> COM/LPT -> LPT2 -> Resource to look for the address and confirm your system can accept ZIP drives in the configuration indicated.

Scanner

Q: I installed a scanner driver under Windows 98, but I couldn't get the scanner to work?

A: You'll have to re-map your PCI I/O Card to 278/378. To re-map a printer card, go to My Computer/Control Panel/System/Device Manager/MultiIO Controller. Select any PCI I/O icon, go to "configure" and select RE-MAP to 278/378. After you re-map a card, you have to restart your computer. After your computer restarts, install your scanner driver. Note: If your motherboard printer port setting is 378H, and you'd like to install a 2-port PCI I/O Card, change your printer port BIOS setting to 3BC normal SPP.

Q: I installed a scanner under Windows NT, but can't get it to work.

A: Re-map your card's address to 278/378 (Control Panel -> PCI MIO Config.). After re-mapping, re-start your computer. Note: You must always power on your scanner before you power on the computer.

Q: After installation, I can't get my scanner to work.

A: Assure that the screws on the scanner cable are screwed securely into the PCI I/O Card. Some scanner cables assign the #2 pin as the ground pin on their 25-pin cables. Normally the #12 pin is the ground pin. Screwing in the cable securely helps ground the scanner.

Q: I installed your PCI I/O Card into LPT3, connected a scanner to the card, but can't get the scanner to work.

A: Scanners can only be assigned to 378,278, and 3BC. If the motherboard's LPT1 is assigned to 378, our 2-port PCI parallel card will be assigned to LPT2 (278), LPT3 is 6000, (3BC will not accept ECP/EPP mode so our driver can not be assigned to 3BC). Thus, you must connect the PCI I/O Card to LPT2. To do that, go to DEVICE MANAGER/COM/LPT/LPT2/RESOURCE to look for the address and confirm your system can accept scanners in the configuration indicated.

Printer

Q: If you install your PCI I/O Card to LPT4 (or higher) some printers won't work. Why?

A: Some printer drivers only support I/O addresses of 278, 378 and 3BC. Simply reassign the I/O address of the port connected to the printer.

Q: I installed a PCI parallel card into my system. Now my system can't boot up and when I power off the printer, the system can not power off. Why?

A: This could be a grounding problem. First power on your computer, then power on your printer, in that order.

Q: I installed a printer port LPT4 in Windows NT/98, but cannot use my printer.

A: You can only use the printer driver supported in the Windows NT/98 operating system. You can not use the driver supported by the printer manufacturer.

Digital Camera

Q: How do I install a digital camera to my PCI I/O Card?

A: Digital Cameras that connect through a serial port, accept COM1, 2, 3 or 4, so you only need to install the camera's cable to the correct port, and then assign the Digital Camera to that port.

MP3 Player

Q: I cannot install my MP3 player to the I/O card.

A: Check your MP3 Player's installation manual. Your MP3 Player must be able to accept LPT1, 2, 3. If your MP3 Player

cannot accept these ports, then you cannot connect it to your card.

Digitizer

Q: I could not install a Digitizer.

A: Check your Digitizer's installation manual. If the only addresses your digitizer accepts are 3F8 and IRQ 4, or 2F8 and IRQ 3, then your driver is too old to support Plug and Play serial cards. The PCI I/O Card can only be used with digitizers that can accept COM1, COM2, COM3, COM4 and supports Plug and Play.

Internal Software Modem

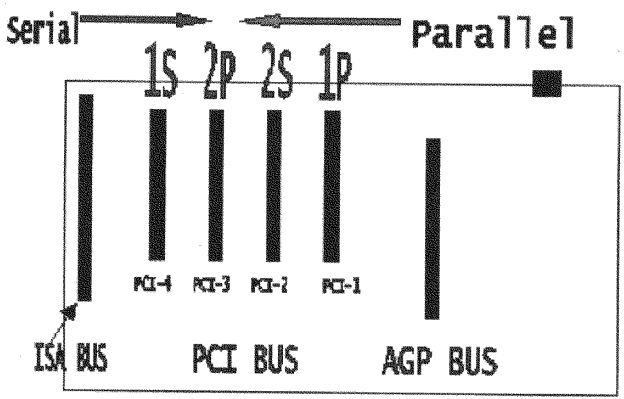
Q: I could not install software for an internal modem on COM 2.

A: You must first install your software for your internal modem, then install our card and its driver, in that order.

After installation, you must re-start Windows 98. You can install additional PCI I/O Cards on your motherboard. Don't install all of the cards at once. First install the two printer port cards, re-map the ports, and then install the additional cards one at a time.

Q: I installed four PCI I/O Cards (1P/2P/1S/2S) and the motherboard has COM1 (3F8), COM2 (2F8) and LPT1 (378). After I installed them, I found COM3/4/5 and LPT2/3/4. What are the correct port locations?

A: LPT and COM port assignments have much to do with the physical location of each card relative to the bus slot on your motherboard. Windows 95/98 automatically assigns the on-board serial ports on your motherboard as COM1 and COM2 (if they are both enabled in your system BIOS). The on-board LPT port will be automatically assigned LPT1 (if it is enabled in your system BIOS). Windows 95/98 will assign add-on PCI I/O serial and parallel port cards as follows:



For add-on serial port cards, Windows 95/98 will assign port numbers by slot # from left to right (from ISA bus to AGP bus).

For add-on parallel port cards, Windows 95/98 will assign port numbers by slot # from right to left (from AGP bus to ISA bus).

From the diagram above, the serial port PCI 1S (on PCI slot 4) is COM3, PCI 2S (on PCI slot 2) the first port is COM4 the second port is COM5. The parallel port, PCI 1P (on PCI slot 1) is LPT2, PCI 2P (on PCI slot 3) the first port is LPT3 and the second port is LPT4

Windows NT 4.x Questions

Q: If you have 4 cards installed on the motherboard, how should you assign ports?

A: Refer to the port assignment question under the Windows 95 section. Windows 95 and Windows NT have the same port assignments except for the parallel port assignments. Under Windows NT, your PCI I/O card supports scanner connections. Most scanners emulate the SCSI interface; therefore, scanners are assigned the last slot on the motherboard so scanners will boot up last. For example, if your PCI 1P (on PCI slot 1) is assigned to LPT1, PCI 2P (on PCI slot 3) is assigned to LPT2 (The second port is assigned to LPT3), and the last port is assigned to parallel port LPT4.

Q: After installing my PCI I/O Card under Windows NT, how do I determine if the installation was successful or not?

A: Go to: Start -> Program -> System Utility -> Windows NT Diagnostic -> Resource -> I/O Port. From the I/O port screen you can determine if your card is working properly. If it isn't, uninstall the driver and try again.